# Atlas Castings & Technology 14 years to the end of the story?

Nathan A. Graves, CHMM
Vice President
Kennedy/Jenks Consultants
Federal Way, WA
(253) 874-0555
nathangraves@kennedyjenks.com

### Background

- Carbon, alloy & specialty steel
- Quench tank (categorical) and stormwater discharge to City storm sewer
- City sewer discharges to Commencement Bay (Superfund Site)
- Recycle quench/stormwater only discharge (anti-backsliding)
- Individual stormwater permit/water quality based limits

## Permit Limits Comparison (µg/l)

		Urban	Highway	
	<u>Limit</u>	<u>Runoff</u>	Runoff	<b>Treatability</b>
Copper	2.9	34	7000	30
Lead	9.2	144	1780	50
Zinc	95.0	160	929	120
Nickel	13.6		53	
Silver	2.3			

#### Permit Exceedances

- Copper 92%
- Nickel 56%
- Zinc 96%

# Water Quality Standards (µg/l)

	Surface Water	<u>Groundwater</u>
Copper	4.8	1000
Silver	2.2	50
Nickel	<b>75</b>	NA
Zinc	95	5000

#### 2002 NPDES Permit

- Limits based on AKART
- Monitoring in pond & groundwater
- Early warning values
- Enforcement limits (pond & GW)

## Infiltration System

- Filtering capacity of soil
- Highly permeable soil
- Deep pond to minimize pumping
- No catch basin inserts
- Oil/water separator
- Sand filter in base





















